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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,598	11/25/2003	Chi-Hung Shen	GP-303628 6024	6024
7590 09/05/2006			EXAMINER	
Kathryn A. Marra			TRAN, HANH VAN	
Mail Code 482-C23-B21 300 Renaissance Center			ART UNIT	PAPER NUMBER
P.O. Box 300			3637	
Detroit, MI 48265-3000			DATE MAILED: 09/05/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

-	Application No.	Applicant(s)		
	10/721,598	SHEN ET AL		
Office Action Summary	Examiner	Art Unit		
	Hanh V. Tran	3637		
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address		
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
1)⊠ Responsive to communication(s) filed on  2a)⊠ This action is FINAL. 2b)□ This  3)□ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 1-33 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-33 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the Idrawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:			

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#### **DETAILED ACTION**

1. This is the Final Office Action from the examiner in charge of this application in response to applicant's amendment dated 6/21/2006.

#### Claim Objections

2. Claims 10-17 are objected to because of the following informalities: claim 10, line 1, "to support first structure" should be "to support a first structure". Appropriate correction is required.

### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-17, and 25-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of independent claims 1, 10, and 25, the limitation "continuously" positionable is vague, thus indefinite for failing to clearly define the metes and bounds of what is continuously positionable. The claims will be examined as best understood or so far as definite.

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,722,646 to Soderberg et al.

Soderberg et al discloses a reconfigurable pallet that supports a structure 24 comprising all the elements recited in the above listed claims including, such as shown in Fig 1, a pallet base 12; and a plurality of modular stanchions 20 that are secured to said pallet base and that are continuously selectively positionable along x and y axes relative to a top surface of said pallet base, said modular stanchions each including a support element that has a height along a z axis that is transverse to said x and y axes, said support element supporting said structure, wherein said support element is movable along said z axis to adjust said height. Soderberg also teaches using a fluid cylinder to raise the height of the support element. In regard to a plurality of operation stages of claim 25, since Soderberg is drawn to "machine tools" operate on a workpiece held the support element, this is interpreted by the examiner to mean that a plurality of operation stages operate on the workpiece held on the support element. The differences being that Soderberg et al does not disclose the modular stanchions adhesively secured to the pallet base by an adhesive layer using a bonding pack, a

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hydraulic pump in fluid communication with said support cylinder and operable to adjust a hydraulic pressure within the support cylinder to move the support element along the z axis, the method of assembling as recited in claims 18-24.

In regard to the modular stanchions adhesively secured to the pallet base by an adhesive layer using a bonding pack, it is well know in the art to use various, well known equivalent and commercially available securing means, such as screws, bolts, nails, magnets and adhesive layer to secure one object to another as a matter of engineering choice; therefore, it would have been obvious and well within the level of one skill in the art to modify the structure of Soderberg et al by having the modular stanchions secured to the pallet base by a well known securing means, such as an adhesive layer using a bonding pack.

Since Soderberg also teaches using a fluid cylinder to raise the height of the support element, and since it is well known in the art to use either hydraulic or pneumatic to raise the support element, it would have been obvious and well within the level of one skill in the art to modify the structure of Soderberg et al by providing a hydraulic pump in fluid communication with said support cylinder and operable to adjust a hydraulic pressure within the support cylinder to move the support element along the z axis.

Since Soderberg et al, as modified, discloses all the elements recited in the method claims, it would have been obvious and well within the level of one skill in the art to perform the method assembly as recited in claims 18-24.

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## Response to Arguments

Applicant's arguments filed 6/21/2006 have been fully considered but they are 4. not persuasive. In response to applicant's arguments on pages 9-10 that the present invention provides nearly infinite number of adjustable positions of the stanchions by adhesively secured to the pallet base anywhere along x and y axes relative to the top of the pallet base, while the apertures of Soderberg provides a finite positions in a support table, the examiner takes the position that the claimed language, e.g., "continuously selectively positionable", fails to provide adequate structural limitations to the claimed for applicant's arguments and to distinguish from the prior art of record, since the term "continuously" is indefinite for failing to clearly the metes and bounds of the claimed invention, and "selectively positionable" is not a positive recitation, it only suggests that the stanchions capable of being selectively position at various locations on the pallet base. Further, although Soderberg does not teach using adhesive for securing the stanchions to the pallet base, as stated in the above claimed rejection, it is well know in the art to use various, well known equivalent and commercially available securing means, such as screws, bolts, nails, magnets and adhesive layer to secure one object to another as a matter of engineering choice; therefore, it would have been obvious and well within the level of one skill in the art to modify the structure of Soderberg et al by having the modular stanchions secured to the pallet base by a well known securing means, such as an adhesive layer using a bonding pack.

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#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 57184028 to Matsuoka et al shows structures similar to various elements of applicant's disclosure.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh V. Tran whose telephone number is (571) 272-6868. The examiner can normally be reached on Monday-Thursday, and alternate Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HVT  $\iint \sqrt{\int}$ August 30, 2006

> LANNA MAI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600